



U.S. Department  
of Transportation

**Research and  
Special Programs  
Administration**

The Administrator

400 Seventh Street, S.W.  
Washington, D.C. 20590

NOV 25 2002

The Honorable Carol J. Carmody  
Acting Chairman  
National Transportation Safety Board  
Washington, DC 20594

Dear Madam Chairman:

Thank you for your July 16 letter concerning safety recommendations I-02-1 and I-02-2 issued to the Research and Special Programs Administration (RSPA). The recommendations were issued following the National Transportation Safety Board's (NTSB) investigation of a rail tank car unloading incident in Riverview, Michigan, on July 14, 2001. In the incident, a pipe attached to a fitting on the unloading line fractured and separated, causing the release of methyl mercaptan. The methyl mercaptan ignited, engulfing the tank car in flames. Fire damage to cargo transfer hoses on an adjacent tank car resulted in the release of chlorine. Three plant employees were killed in the accident; about 2,000 people in the surrounding neighborhood were evacuated from their homes. The recommendations state:

**I-02-1**

*Develop, with the assistance of the Environmental Protection Agency and Occupational Safety and Health Administration, safety requirements that apply to the loading and unloading of railroad tank cars, highway cargo tanks, and other bulk containers that address the inspection and maintenance of cargo transfer equipment, emergency shutdown measures, and personal protection requirements.*

**I-02-2**

*Implement, after the adoption of safety requirements developed in response to Safety Recommendation I-02-1, an oversight program to ensure compliance with these requirements.*

The Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) include requirements for the inspection and maintenance of cargo transfer equipment, such as piping and transfer hoses, that is part of a bulk packaging or carried on a vehicle used to transport a bulk packaging. The HMR also include emergency shutdown measures for unloading operations to which the HMR apply. For example, the HMR include comprehensive regulatory requirements applicable to the unloading of cargo tank motor

vehicles used to transport liquefied compressed gases. In conformance with these requirements, operators of cargo tank motor vehicles (CTMVs) used to transport liquefied compressed gases on a monthly basis must visually inspect each CTMV's discharge system, including piping and hoses installed or carried on the CTMV. In addition, operators must conduct an annual leakage test on each CTMV's discharge system and must replace or repair damaged components before placing the CTMV back in service. Further, each cargo tank used to transport liquefied compressed gases must be equipped with an emergency discharge control system that activates automatically or can be activated by remote control in the event of an unloading emergency. Each CTMV that is required to be equipped with an emergency discharge control system must carry on the vehicle written emergency discharge control procedures for all delivery operations. (See §§ 173.315, 177.840 and 180.416 of the HMR.)

As your letter notes, the Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA) have regulatory authority for cargo transfer equipment that is owned by and located at a fixed facility. The HMR do not prescribe inspection or maintenance requirements for equipment at a fixed facility that is used to unload bulk packages, such as rail tank cars or cargo tank motor vehicles. We work closely with both EPA and OSHA on hazardous materials issues. For example, in 1999 we wrote to OSHA to highlight the regulation we adopted concerning maintenance and repair of cargo tank transfer hoses and suggested that OSHA adopt a similar regulation for hoses maintained at fixed facilities. We also recommended that OSHA adopt a regulation to require facilities receiving liquefied compressed gases to install emergency discharge control systems that would shut down unloading operations automatically in the event of a catastrophic hose failure.

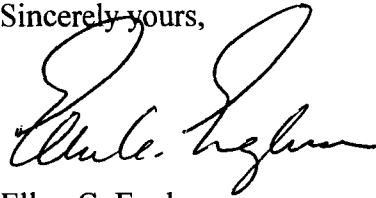
As your letter indicates, we are currently engaged in a rulemaking (HM-223) to clarify the applicability of the HMR to specific functions and activities, including hazardous materials loading and unloading operations and storage of hazardous materials during transportation. We have consulted extensively with EPA and OSHA throughout the HM-223 rulemaking process, exchanging information on current requirements applicable to loading, unloading, and storage operations involving hazardous materials in bulk packagings, such as cargo tanks and rail tank cars. This consultation and cooperation will continue as we finalize HM-223 and resolve the jurisdictional questions that are at issue in that rulemaking.

We will review the HMR requirements applicable to cargo tank motor vehicles and rail tank cars to identify measures currently utilized for transportation that could be adapted to fixed facilities to improve the safety of unloading operations, including requirements for inspection and repair of cargo transfer equipment and emergency shutdown measures. We will make recommendations to OSHA and EPA for appropriate actions to enhance the safety of cargo transfer operations based on this review.

We request that you classify recommendations I-02-1 and I-02-2 6 as "Open-Acceptable Alternative Action." We thank you for consideration of our request.

If you have any questions, please contact me or Ms. Patricia Klinger, Director of External Communications, at (202) 366-4831.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Ellen G. Engleman". The signature is fluid and cursive, with a large initial "E" and a long, sweeping underline.

Ellen G. Engleman